

Application Serial No.: 10/623,243
Attorney Docket No.: 0140111

In the Claims:

Claim 1 (previously presented): An overmolded module comprising:
a surface mount component situated over a substrate, said surface mount component comprising a first terminal and a second terminal;
a first and a second pad situated on said substrate, said first pad being connected to said first terminal and said second pad being connected to said second terminal;
a solder mask trench situated underneath said surface mount component, said solder mask trench being filled with molding compound, said solder mask trench formed within a solder mask.

Claim 2 (original): The overmolded module of claim 1 further comprising a moldable gap situated between a bottom surface of said surface mount component and a top surface of said substrate, said moldable gap including said solder mask trench.

Claim 3 (original): The overmolded module of claim 2 wherein said moldable gap is filled with said molding compound.

Claim 4 (original): The overmolded module of claim 1 further comprising an overmold, said overmold being situated over said surface mount component.

Application Serial No.: 10/623,243
Attorney Docket No.: 0140111

Claim 5 (original): The overmolded module of claim 1 wherein said surface mount component is selected from the group consisting of a resistor, a capacitor, an inductor, a diplexer, a diode, and a SAW filter.

Claim 6 (original): The overmolded module of claim 3 wherein said moldable gap has a height of between approximately 45.0 micrometers and 65.0 micrometers.

Claim 7 (original): The overmolded module of claim 1 wherein said overmolded module is an MCM.

Claim 8 (original): The overmolded module of claim 1 wherein said substrate comprises a laminate circuit board.

Claim 9 (previously presented): An overmolded module comprising:
a surface mount component situated over a substrate, said surface mount component comprising a first terminal and a second terminal;
a first and a second pad situated on said substrate, said first pad being connected to said first terminal and said second pad being connected to said second terminal;

Application Serial No.: 10/623,243
Attorney Docket No.: 0140111

a moldable gap situated underneath said surface mount component, said moldable gap comprising a solder mask trench, said solder mask trench being filled with molding compound, said solder mask trench formed within a solder mask.

Claim 10 (original): The overmolded module of claim 9 wherein said moldable gap is filled with said molding compound.

Claim 11 (original): The overmolded module of claim 9 further comprising an overmold, said overmold being situated over said surface mount component.

Claim 12 (original): The overmolded module of claim 11 wherein said overmold comprises said molding compound.

Claim 13 (original): The overmolded module of claim 9 wherein said moldable gap has a height of between approximately 45.0 micrometers and 65.0 micrometers.

Claim 14 (original): The overmolded module of claim 9 wherein said surface mount component is selected from the group consisting of a resistor, a capacitor, an inductor, a diplexer, a diode, and a SAW filter.

Application Serial No.: 10/623,243
Attorney Docket No.: 0140111

Claim 15 (original): The overmolded module of claim 9 wherein said overmolded module is an MCM.

Claim 16 (previously presented): An overmolded module comprising:
a surface mount device situated over a substrate, said surface mount device comprising a plurality of terminals;
a plurality of pads situated on said substrate, each of said plurality of pads being connected to a respective one of said plurality of terminals;
a solder mask trench situated underneath said surface mount device, said solder mask trench being filled with molding compound, said solder mask trench formed within a solder mask.

Claim 17 (original): The overmolded module of claim 16 wherein said surface mount device is a leaded surface mount device.

Claim 18 (original): The overmolded module of claim 16 wherein said surface mount device is a leadless surface mount device.

Claim 19 (original): The overmolded module of claim 16 wherein said surface mount device comprises at least one component, said at least one component being selected from the group consisting of an active component and a passive component.

Application Serial No.: 10/623,243
Attorney Docket No.: 0140111

Claim 20 (original): The overmolded module of claim 16 wherein said overmolded module is an MCM.